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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/213,581	12/17/98	LYS	I CKC-012.07

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EXAMINER

LEE, W

ART UNIT

PAPER NUMBER

2821

DATE MAILED: 03/28/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

# Office Action Summary

Application No.  
09/213,581

Applicant(s)

Lys et al.

Examiner

Wilson Lee

Group Art Unit  
2821



☒ Responsive to communication(s) filed on Nov 17, 2000

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claim

☒ Claim(s) 1-57 is/are pending in the application

Of the above, claim(s) none is/are withdrawn from consideration

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 1-57 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☒ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 14

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

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## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Phares(5,420,482) cited by applicant in IDS.

Regarding Claims 1-40, 51-57, Phares discloses a microcontroller(60) as a processor for controlling the amount of electrical current supplied to the illumination display comprised of light elements(48R, 48B, 48G) which generate light of a range of colors(e.g. red, green, blue) to illuminate the object, and a D/A converter that receives the pulse width signal for determining the intensity of the light elements.

As discussed above, Phares essentially discloses the claimed invention but fails to disclose the light elements being LEDs. However, since Phares does not limit the choices from all kinds of light elements, the implementation of such LEDs is not restricted to his invention. Moreover, it would have been obvious in the knowledge generally available to one of ordinary skill in the art to use LEDs in Phares as light elements in order to attain the following advantages: reduced power consumption, simplicity, low cost, lengthen life, etc. Those advantages of LEDs were well published more than 24 years ago. Please see cited prior arts.

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Phares, as discussed above, essentially discloses the claimed invention but fails to explicitly disclose the specific usage as claimed such as positioning the system to affect an aquarium, illuminating the floor, affect an informational board, etc. However, it would have been obvious to one of ordinary skill in the art to use Phares' invention to illuminate any object in order to provide brightness to the observer on the object. Since Phares fails to limit the choice of all kind of usage, the implementation of such specific usage is not restricted. Any other usages should be considered as intended uses.

Regarding Claims 41, 42, 43 and 44, Phares discloses the lighting system comprising a driver(94R, 94B or 94G) as a current sink coupled to the light elements(48R, 48B or 48G) (See Figure 4 of Phares) having an input responsive to an activation signal from the control(40); transmitter(64) as an addressable controller having a Logic Control network(76) for providing alterable address, the controller coupled to the input and having Pulse Generator(80) as a signal generator for generating the activation signal for a predefined portion of a timing cycle(See Col. 3, lines 18-26 of Phares); the addressable controller further comprising an internal shift register means as a receiver for receiving data corresponding to the alterable address(See Col. 3, lines 57-60 of Phares) and indicative of the prefined portion of the timing cycle(See Figure 1 and Col. 4, lines 4-23 of Phares).

As discussed above, Phares essentially discloses the claimed invention but fails to disclose the light elements being LEDs. However, since Phares does not limit the choices from all kinds of light elements, the implementation of such LEDs is not restricted to his invention. Moreover, It

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would have been obvious in the knowledge generally available to one of ordinary skill in the art to use LEDs in Phares as light elements in order to attain the following advantages: reduced power consumption, simplicity, low cost, lengthen life, etc. Those advantages of LEDs were well published more than 24 years ago. Please see cited prior arts.

Phares, as discussed above, essentially discloses the claimed invention but fails to explicitly disclose the specific usage as claimed such as positioning the system to illuminate a non-opaque container, or vending machine. However, it would have been obvious to one of ordinary skill in the art to use Phares' invention to illuminate any desired object in order to provide brightness to the observer from the object. Since Phares fails to limit the choice of all kind of usages, the implementation of a such specific usage is not restricted. Any other usages should be considered as intended uses.

3. Claims 45-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fitch(5,912,653).

Fitch discloses an advanced LCD system controlled by microprocessor(22) mounted on a clothing means(10), comprising a sensor or receiver(68) that is capable of recording and replaying data, and displaying video or programmable image(See Figure 6 and Col. 3, lines 17-39).

Fitch, as discussed above, essentially discloses the claimed invention but fails to show an LED system. However, it is known to a skilled in the art that LCD system have numerous advantages over LED system. Please see Tai et al. (5,371,618), Col. 1, lines 14-28 and Mohebban (4,818,072), Col. 2, lines 13-28, both cited in PTO-892. Therefore, degrading Fitch's

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invention from using LCDs to LEDs such as described in the claimed invention is absolutely *not* considered as a novelty.

#### *Response to Arguments*

4. Applicant's arguments with respect to claims 1-57 have been considered but are moot in view of the new ground(s) of rejection.

#### *Conclusion*

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Brooks (5,083,063) discloses a similar invention comprising a current sink, LED, a processor, a control circuit, a switch and a D/A converter. Tai et al. (5,371,618) and Mohebban (4,818,072) discloses the advantages of LCD system over LED system. Molldrem, Jr. (4,388,589) discloses that blue LED was discovered at that time (See Abstract of Molldrem). Bergey et al. (3,974,637), Stockinger et al. (3,958,885) and Wakamatsu et al. (3,909,670) all show the advantages of using LEDs.

#### *Correspondence*

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Wilson Lee whose telephone number is (703) 306-3426.
7. Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center receptionist whose telephone number is (703) 308-0956.
8. Papers related to Technology Center 2800 applications may be submitted to Technology Center 2800 by facsimile transmission. Any transmission not to be considered an official response

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must be clearly marked "DRAFT". The Technology Center Fax Center number is (703) 308-7722 or (703) 308-7724.

WL

March 22, 2001

*Haissa Philogene*  
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Primary Examiner  
A.U. 2821